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EXAMINER

LEYSON, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/819,072	GIESLER ET AL.	
	Examiner	Art Unit	
	Joseph Leyson	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>12</u> | 6) <input type="checkbox"/> Other: |

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1. The Letter filed on 29 July 2003 is acknowledged. The letter indicated that the Office Action mailed on 4 June 2003 was defective in that the IDS filed on 11 October 2001 was not considered. This office action takes into consideration the IDS filed on 11 October 2001 and attaches a copy of the Form PTO-1449 filed with the IDS. Since this error was brought to the attention of the Office more than one month after the date of the Office Action, the Office has set **a new period for reply** to substantially equal the time remaining in the reply period, specifically **2 months** from the date of mailing of this Office Action (MPEP 710.06). Copies of the Form PTO-892 and the references cited thereon, and of the Form PTO-1449 (part of the IDS filed on 1 April 2003), all attached to the Office Action mailed on 4 June 2003, are NOT being re-sent.

2. Applicant's election of Group I, apparatus claims 1-14, in Paper No. 9 filed on 9 April 2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

3. Claims 15-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

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4. The title should be amended to reflect the elected invention, i.e., apparatus only.

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The disclosure (i.e., pp. 1 and 3) should not refer to specific claim numbers because the content of the claims can change during the prosecution thereof.

7. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

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- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 2, 3, 19 and 32. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid

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abandonment of the application. The objection to the drawings will not be held in abeyance.

9. Claim interpretation:

In claim 9, "preferably 8°" is understood only to be an example of a preferred angle and is NOT a positive limitation of the claim.

In claim 12, "preferably approximately 1:4" is understood only to be an example of a preferred ratio and is NOT a positive limitation of the claim.

10. Claim 14 is objected to because of the following informalities: in claim 14, line 3, "to" should be changed to --two-- for proper spelling. Appropriate correction is required.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 6, 8 and 11 recite "type" which is indefinite as to its metes and bounds. The examiner suggests deleting "type"

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from the claims. Claim 1 recites a system "consisting" of various elements, but the dependent claims add elements to the system. The examiner suggests changing "consisting" and "consists" in the claims to --including-- and --includes--, respectively.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yarusso et al.(-249).

Yarusso et al.(-249) teach a system, that corresponds to the instant system, which consists of a gear pump 26, a filter 27, and a screw extruder 20 which consists of a screw and a screw casing (see figs. 1 and 2; col. 5, lines 1-3), the screw extruder 20 being arranged in front of the gear pump 26 in the delivery direction of the pumping medium, and the filter 27 arranged behind the gear pump 26.

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yarusso et al.(-249) in view of Degady et al.(-306).

Yarusso et al.(-249) disclose the system substantially as claimed as mentioned above, except for a metal detector as recited by the instant claim.

Degady et al.(-306) disclose a metal detector 52 before an extruder for detecting metal contaminants in an extrusion apparatus.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Yarusso et al.(-249) with a metal detector before the extruder because such a metal detector would enable metal contaminants to be detected as disclosed by Degady et al.(-306). As to the control means for stopping operation of the system, such control would be well within one of ordinary skill in the art to prevent contaminated products from being produced.

18. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yarusso et al.(-249) in view of Zahradnik(-641) and/or Loomans(-135).

Yarusso et al.(-249) disclose the system substantially as claimed as mentioned above, except for the screw and/or the screw casing each having one hollow space respectively with at least two openings for admitting and discharging a temperature adjusting medium, as recited by the instant claim.

Zahradnik(-641) a screw (see fig. 3) having one hollow space respectively with at least two openings for admitting and discharging a temperature adjusting medium to control the extrudate temperature.

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Loomans(-135) a screw casing having one hollow space 11 respectively with at least two openings for admitting and discharging a temperature adjusting medium to control the extrudate temperature.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Yarusso et al.(-249) such that the screw and/or the screw casing each has one hollow space respectively with at least two openings for admitting and discharging a temperature adjusting medium because such modifications are respectively disclosed by Zahradnik(-641) and Loomans(-135) and would enable control of the extrudate temperature.

19. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten(-838) in view of Yarusso et al.(-249).

Baumgarten(-838) discloses a system having a spraying head 9, a gear pump 5, 6 and a screw extruder with a screw 4 and a screw casing 2, 3, the screw extruder being arranged in front of the gear pump 5, 6 in the delivery direction of the pumping medium. The screw 4 projects into a casing 1 of the gear pump 5, 6. However, Baumgarten(-838) does not disclose a filter arranged behind the gear pump.

Yarusso et al.(-249) disclose a system having a gear pump 26, a filter 27 for removing contaminants, and a screw extruder 20 which includes a screw and a screw casing (see figs. 1 and 2; col. 5, lines 1-3), the screw extruder 20 being arranged in front of the gear pump 26 in the delivery direction of the pumping medium, and the filter 27 arranged behind the gear pump 26. The filter 27 is arranged between the gear pump 27 and a spraying head 32.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the system of Baumgarten(-838) with a filter arranged behind the gear pump so that the filter is arranged between the gear pump and the spraying head because such a filter located between a gear pump and a spraying head would remove contaminants as disclosed by Yarusso et al.(-249).

20. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten(-838) in view of Yarusso et al.(-249) as applied to claims 1, 3 and 4 above, and further in view of Degady et al.(-306).

Degady et al.(-306) disclose a metal detector 52 before an extruder for detecting metal contaminants in an extrusion apparatus.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the system with a metal detector before the extruder because such a metal detector would enable metal contaminants to be detected as disclosed by Degady et al.(-306). As to the control means for stopping operation of the system, such control would be well within one of ordinary skill in the art to prevent contaminated products from being produced.

21. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baumgarten(-838) in view of Yarusso et al.(-249) as applied to claims 1, 3 and 4 above, and further in view of Zahradnik(-641) and/or Loomans(-135).

Zahradnik(-641) a screw (see fig. 3) having one hollow space respectively with at least two openings for admitting and discharging a temperature adjusting medium to control the extrudate temperature.

Loomans(-135) a screw casing having one hollow space 11 respectively with at least two openings for admitting and discharging a temperature adjusting medium to control the extrudate temperature.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the system such that the screw and/or the screw casing each has one

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hollow space respectively with at least two openings for admitting and discharging a temperature adjusting medium because such modifications are respectively disclosed by Zahradnik(-641) and Loomans(-135) and would enable control of the extrudate temperature.

22. Claims 5-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

23. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or reasonably suggest the combination of elements defining the system of claims 5-13, particularly including the screw casing having the at least one conical part, the screw having, in the area of the conical part, at least one tapering, and the screw being axially displaceable in the screw casing for the controlled feeding of energy into the pumping medium.

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fox(-040) is cited as of interest.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph

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Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jl

jl
August 6, 2003

James P. Mackey
JAMES P. MACKEY
PRIMARY EXAMINER

8/7/03